# RETHINKING TWENTY-FIRST CENTURY ACQUISITION: EMERGING TRENDS FOR EFFICIENCY ENDS

Conrad S. Ciccotello, Steve G. Green, and Martin J. Hornyak

Understanding three emerging public-sector trends—privatization, promotion of competition, and continuous process improvement—is essential to achieve efficiencies sought by acquisition managers in the 21st century.

ith the collapse of the Soviet threat and a steady decline of available resources, the Department of Defense (DoD) is adapting to unprecedented change. The military services in the 1990s have introduced profound changes to DoD's financial and resource management systems, compared to when former Secretary of Defense Robert McNamara first introduced the Planning, Programming, and Budgeting System (PPBS) (Hough, 1992). The Defense Performance Review (DPR), Chief Financial Officer's Act (CFO), and Government Performance and Results Act (GPRA) all generate policy and legislation demanding considerations and measurement of efficiency in DoD operations. Public functions that fail to meet the call for improved efficiency are being privatized or consolidated away.

Acquisition management is not immune from these demands. Program managers must understand and take advantage of these new initiatives to improve efficiency or face possible elimination as public employees. Here we examine three current public-sector management policy trends: (a) privatization of functions, (b) promotion of competition between government entities or civilian contractors, and (c) continuous process improvement. For program managers, determining which policies to consider and implement will be a daunting challenge. To be successful, an acquisition manager must be aware of policy initiatives and develop means of assessing which policy options are best. Here we outline some current policy initiatives affecting the acquisition community, then investigate several assessment alternatives

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Form Approved OMB No. 0704-0188 that make use of applicable private-sector business metrics for policy evaluations.

## THE ENVIRONMENT

The American defense budget has been shrinking in real terms since the mid-1980s. From 1985 through 1997, DoD will experience overall defense budget cuts to equal 42% (including a 30% reduction in personnel), overseas base closures of 35%, and U.S. base shutdown of 15% (DoD Comptroller, 1994). Despite these cuts, the requirements to support critical national interests in various regions of the world remain. With budgets shrinking and requirements steadily growing, DoD has logically focused on initiatives to increase efficiency. Acquisition management has seen a host of formal acquisition improvement, streamlining, and reform initiatives that suggest or direct how to improve the way in which weapon systems are procured (Harman, 1995). Most recently the Federal Acquisition Streamlining Act of 1994 culminated a concerted effort to place reform of government procurement at the top of the list of national priorities (van Opstal, 1995).

Despite these reform attempts, numerous factors—such as DoD's complex organizational structure, lack of incentives

to improve operations, dynamic requirements, and shifting direction—hamper efforts to improve acquisition management. A recent study requested by the Office of the Under Secretary of Defense for Systems Integration investigates the conflicts of roles and incentives inherent in acquisition management (Fox, Hirsch, & Krikorian, 1995). The study highlights critical issues within the defense acquisition culture, and suggests that acquisition program managers top priority is keeping their programs alive and moving through the acquisition process. This can occur even when the program's completion may not be consistent with larger interests. A 1992 General Accounting Office (GAO) study concludes that traditional targets of acquisition reform including performance shortfalls, schedule delays, and cost increases, are the logical consequences of the current acquisition culture (GAO/ NSIAD-93-15, 1992).

Public sector organizations often have problems achieving efficiency without compromising mission. Prager (1994) argues the public sector is inefficient because of "...a lack of political will to establish efficiency as a high-level priority of government operations." He argues that public sector management is not given with sufficient flexibility to pursue efficiency goals. Improving public sector efficiency is further complicated by an in-

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centive structure that is neutral toward or even discourages cost savings (Prager, 1994). In addition, Kelman (1990) suggests that the lack of competition, autonomous choice, profit motivation, and timely procurement source selection decisions undermine government efficiency. Values such as equitable distribution of government contracts for procured goods may also compete with efficiency goals. Finally, Meier (1987) argues that efficiency within many public organizations is not even a relevant goal and "the goal of government agencies is universal service rather than efficient service." (p. 7)

Despite the current acquisition management environment, we believe that continued improved efficiencies in system acquisition are possible. Historically, acquisition efficiency meant procuring the most goods and services for the least amount of money. However, the recent emphasis in acquisition is to find new and innovative ways to reduce costs, increase efficiency, and assess the attainment of these goals. Recent public policy trends such as privatization, competition, and process improvement may offer insight into how efficiencies can be obtained. Next we will describe these policy trends and discuss how to assess their utility for improving acquisition management.

# **POLICY TRENDS**

## **PRIVATIZATION OF FUNCTIONS**

Privatization is the decision to have a private sector entity perform a task currently performed by government employees (Donahue, 1989). More than 100 countries have privatized \$445 billion worth of state-owned assets and enterprises in

the last decade (Shoop, 1995). Privatization encompasses a range of activities including government asset sales, government service shutdowns, quasi-governmental relationships, public-private partnerships, and contracting out (Shoop, 1995). The potential for privatization is large considering the government currently performs many functions in-house that could be done by the private sector. Examples include building, vehicle, and aircraft maintenance; payroll; financial management; medical care; fire fighting; and security.

Recent examples of privatization range from employee word processing training to management of nuclear weapons facilities and base operations (Hudson, 1995). A recent report by DoD's Commission on Roles and Missions of the Armed Forces (CORM) suggests a greater reliance on the private sector and more privatization of defense support (White, 1995). Acquisition program managers must now ask if the acquisition function itself is vulnerable to privatization. Recent acquisition policy advances such as Defense Acquisition Workforce Improvement Act of 1991 have made the field more specialized. This law designates acquisition positions, an acquisition corps, and identifies qualifications for acquisition program managers in a threelevel system. These efforts are designed to differentiate acquisition personnel as well as improve their performance. Potentially, these initiatives could help determine which functions or levels of responsibility are suitable for privatization. Although a threat to acquisition management positions, privatization can also present opportunities, such as widening the range of strategy options that affect military systems acquisition and their life-cycle (O&M) costs.

# COMPETITION BETWEEN GOVERNMENT OR CIVILIAN CONTRACTORS

In terms of fiscal policy, allowing competition between the government and the private sector represents an alternative less severe than complete privatization of the public entity. Supporters of public—private competition argue that it forces public or-

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ganizations to become more efficient by reducing unnecessary costs. In addition, it can encourage innovation on both sides and also push suppliers to improve the

quality of their services. However, disparities in current accounting methods and rules between the two sectors make evaluating costs challenging. These inherent difficulties in public and private-sector competition are key barriers to effective implementation. While shrinking government is relying more on private-sector contractors, the process used to compete for goods and services remains bureaucratic and risk adverse (Corbin, 1995).

The formal policy facilitating competition is contained in OMB Circular A-76, "Commercial Practices and Competition." This policy establishes guidelines and procedures for the competition of functions between the government and the private sector. Although this program is more than 30 years old, private contractors have only recently been permitted to compete for many DoD functions.

The depot-level maintenance of mili-

tary equipment is one area where competition has gained considerable attention and media coverage. A recent Congressional Budget Office study (1995) questions whether the public and private sectors traditional depot-level maintenance roles remain appropriate in today's environment. Currently, the private sector performs about 32% of DoD's total depotlevel maintenance. The total depot work being done by the private sector ranges from 3% of Navy submarines to 100% of Army aircraft maintenance (CBO, 1995). In addition, there are many mixed modes of operation possessing both public and private sector characteristics. One example is government-owned and contractor-operated (GOCO) plants or facilities. Consequently, the extent of private sector involvement is sometimes difficult to determine

# **PROCESS IMPROVEMENT**

Improvement of processes is another way for acquisition program managers to increase efficiency. Historically, public fiscal activities have focused on expenditures and zeroing out the program's budget rather than reducing costs (Gansler, 1980). As Donahue (1989) argues, cumbersome rules and procedures associated with public procurement contribute to acquisition's inherent lack of efficiency. Recently, however, the Secretary of Defense authorized widespread waiver authority on policies and regulations to mitigate many of these traditional obstacles to process improvement (Perry, 1994). With restrictions removed, acquisition program managers have increased flexibility to implement processes improving efficiency. Two popular process improvement techniques that may help the acquisition program manager are business process reengineering (BPR) and improved costing methods.

DoD is embracing business process reengineering/improvement (BPR/I) as a key element in its effort to enhance efficiency. Hammer and Champy (1993) define reengineering processes as the fundamental rethinking and radical redesign of business processes to bring dramatic improvements in performance. The Comptroller General of the United States, Charles A. Bowsher, states, "reengineering and modern technology offer huge opportunities to reduce federal costs while also improving the quality of government service" (GAO/T-OCG-95-2, 1995, p. 1) and "we support these [reengineering] efforts and will continue to evaluate DoD's progress in fundamentally improving its business processes" (GAO/T-AIMD-95-143, 1995, pp. 11–12). Acquisition management examples include a recent National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory (JPL) space mission planning BPR effort that took a string of 25-30 functional activities and clarified them as three major processes. JPL thus refocused themselves as a mission-driven organization with much more insight into costs (Beyond the Bottom Line, 1995). At the MILSATCOM System Program Office at Los Angeles Air Force Base, management redesigned many of its processes around the adoption of innovative office technologies such as electronic transfer of data and video teleconferencing (Kiatowski, 1994).

# **ASSESSMENT OF POLICY ALTERNATIVES**

Which of these policies—privatization, competition between government and private contractors, and process improvement—may benefit the acquisition program manager? Several ways to assess these policy options exist.

There are many reasons why DoD had not earlier considered policy options using the private sector. One is the lack of internal transfer prices for government goods and services. Evaluating whether to

build in-house or contract out is difficult without credible and relevant costs from which to determine an inhouse cost basis. Further, if bids do not con-

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tain the same cost elements or use the same rules to develop those costs (e.g., depreciation), they cannot easily be compared. Finally, a relevant unit cost comparison was often impossible. In an effort to balance the playing field, DoD distributes a Cost Comparability Handbook" spelling out adjustments needed to render its cost comparable to private firms (CBO Report, 1995). OMB Circular A-76 studies also have similar leveling factors and considerations.

Private sector entities rely on transfer pricing as a basis to determine internal prices and costs. In the public sector, a revolving fund can facilitate transfer pricing. A revolving fund is a financial tool used to transfer charges between public organizations. Currently, DoD uses the Defense Business Operations Fund

(DBOF) as its revolving fund. Formed by the 1991 Defense Authorization Bill, it merged DoD's Stock and Industrial Funds into one giant fund (The Pentagon, 1993a). As of 1994, the DBOF contains \$85 billion, allowing certain organizations to transfer the charges for products between them (DoD Comptroller, 1994). The cost of non-value-added activities can also be recognized because visible prices are attached to those activities or processes and one can derive relevant unit costs.

As currently employed, the DBOF has some restrictions that interfere with the establishment of true marketlike incentives. One limitation is the use of legislatively established rates, rather than market prices or unit cost, to determine transfer prices (OPM, 1987; The Pentagon, 1993b). Legislative controls on prices and lack of profit incentives impede the efficient allocation of resources within public organizations and prevent true competition. If a public organization were allowed to make, retain, spend, and distribute profit, its management would have the incentive to improve its organizational efficiency. With practices now being employed by DBOF, the acquisition manager can credibly assess programmatic decisions using private sector practices like financial analysis and activity-based costing (ABC).

#### FINANCIAL ANALYSIS

The use of traditional private sector financial analysis to compare public and private sector operations is one means to evaluate the use of different policy options. If financial analysis suggests a public entity performs much less efficiently than a comparable private sector business, then privatization, competition, or process improvement options can be considered. In the past, traditional financial analyses have not been generally performed on public functions because of the lack of relevant data. Recent legislation now has made possible the financial comparisons of public and private sector functions. For example, using financial data directed by the CFO Act, several financial ratios can be computed. While the comparisons might not be completely valid, the realization that common-size assessments are possible is a significant development useful to acquisition program managers.

Financial ratio analysis is a private sector technique used to compare the operations of firms. This technique facilitates the analysis of differently sized organizations within the same line of business. The use of ratio measures such as liquidity, asset management, and profitability are appropriate for this type of assessment (Harrison & Horngren, 1992). For example, by examining asset management measures such as turnover (i.e., how well an entity uses its resources to generate sales) or inventory turnover (i.e., how fast the entity turns over its inventory), efficiency comparisons can be made. By evaluating basic financial ratios, an acquisition program manager can assess whether the decision to privatize, compete, or improve a function or process has merit. A recent example is the analysis of retailing operations of the Army and Air Force Exchange Service (AAFES). By comparing the operating performance of other large retailers such as Wal-Mart, one can determine what needs improvement. Some comparisons may show that the private sector can do a better job and should be allowed to do so.

Although the emergence of relevant accounting data has potential benefits in decision making, privatizing decisions remain complex. Privatization often may mean certain government facilities get less use. Local constituents may object to the closing or reduction of government facilities, believing that their local economy will suffer lost jobs and lower tax revenue. However, those losses are often offset by new contractor jobs. The ongoing debate on how to operate depot-level maintenance is testimony to this phenomenon (CBO, 1995). Perhaps the most significant consideration is whether some functions should be exempt from privatization because of combat capability concerns, national security, and other potential conflicts of interest.

Financial analysis can also help the acquisition program manager improve processes and become more efficient. With the advent of such legislation as the CFO Act and the existence of DBOF operations, for the first time data may be available that will allow program managers to use private sector efficiency metrics. Also, financial analysis using concepts such as operating leverage may illustrate which acquisition management approach is the most cost efficient and whether privatization or competition of certain functions is appropriate (Ciccotello & Green, 1995).

# **ACTIVITY-BASED COSTING**

Privatization, competition, and process improvement are facilitated by the growing use of ABC methods in the accounting community. These methods tie the total costs of production or services more closely to the activities driving the costs

(Johnson & Kaplan, 1991). Before DBOF and ABC, the costs of many requested goods and services were "hidden" to man-

agers. With unit costs visible and relevant, managers may decide whether a product is really needed. If costs are too

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high, the commander or acquisition program manager can shop elsewhere for the product or do without. In a related study, Eldenburg (1994) concludes that making costs visible to physicians actually reduces health care costs.

Implementing process improvement involves the adoption of advanced costing methods. Acquisition program managers can learn by studying recent developments in the private sector accounting community. Knowledge of relevant total costs and their effect on unit costs, as revealed through modern management information systems and innovative accounting practices, may help managers become more efficient by improving the tracking accuracy of the true cost of producing output (Stevenson & Barnes, 1993). With accurate information about unit of production or activity costs and the identification of cost drivers, acquisition program managers can re-evaluate their acquisition strategies. Cost knowledge allows them to discern value-added activities from non-value-added activities. By eliminating the latter, total costs can decrease. A decrease in total costs helps an organization become more efficient and allows the cost savings to be used elsewhere. Having an idea of a true unit cost may mean the survival of a program. An

example might be the increasing congressional concern about the cost of one cadet (unit) at the Air Force Academy as compared with other commission sources or the extremely large cost now attached to a single (unit) B-2 Bomber (McMillin, 1990).

# **INCENTIVES**

Some would argue that without motivation, workers have little incentive to become efficient. In many cases, perverse incentives may encourage inefficiency—for example, an effort to secure bigger budgets for non-value-added activities. Incentives for efficiency may come from the threat of having functions privatized or be

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derived from rewards for improvements in performance. While possible incentive programs for acquisition program managers would be a function of size.

service, and system, the knowledge that private sector acquisition program managers may be easier to motivate might be a key factor to consider. In fact, some argue that the current basic approach to buying major weapon systems, with a government program office mirroring a contractor program office, is a wasteful duplication of effort. Perhaps only one organization is needed and it may indeed be the contractors. This approach to process improvement would result in privatization.

For acquisition program managers, competition traditionally means more choices. It may also mean increased efficiency. If government and private contractor facilities are bidding for production work, the competition could lower acquisition costs. To the extent that this minimizes the market power "sole source" contractors now possess, the result will be reduced acquisition costs. More choices for out-year maintenance work could also reduce life-cycle cost estimates, which would make a program more appealing to DoD decision makers. Also, top-level acquisition managers must relinquish some direct financial control to push decisionmaking down to lower levels. For example, acquisition program managers could be given the power to make procurement decisions and be held accountable for financial performance. Such flexibility could change how program offices are staffed and how acquisition contracts are designed. Acquisition program managers could decide, for example, to privatize staff functions typically done in-house. In sum, the result of enhanced program manager power would be the use of more innovative acquisition strategies. Whether this change ultimately benefited the government would be an empirical issue worthy of examination.

#### CONCLUSION

Three policy initiatives are sweeping public sector management: privatization, competition between the public and private sector, and process improvement. We believe that acquisition program managers must not only be aware of these trends, they must implement policies to improve

efficiency or face the threat of privatization themselves. Private sector assessment metrics and cost development approaches such as financial analysis and ABC, are a means of comparing the operations of public and private entities. We argue that privatization, competition between government entities and civilian contractors, and process improvement all represent current trends in DoD manage-

ment community that should interest acquisition program managers. As current federal financial management reform efforts continue, the acquisition program manager should proactively investigate and implement them. If they do not embrace this change, acquisition as we know it surely will not survive into the twenty-first century.

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